



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

21

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/894,082	06/28/2001	Cornelis Pieter Janse	NL 000363	5314
24737	7590	12/16/2004	EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			MICHALSKI, JUSTIN I	
			ART UNIT	PAPER NUMBER
			2644	

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/894,082	JANSE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Justin Michalski	2644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### **Status**

1) Responsive to communication(s) filed on 03 August 2004.

2a) This action is FINAL.                            2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### **Disposition of Claims**

4) Claim(s) 2-11 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) 2,3 and 9 is/are allowed.

6) Claim(s) 4,5,7 and 11 is/are rejected.

7) Claim(s) 6,8 and 10 is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### **Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### **Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### **Attachment(s)**

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_

5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 4, 5, 7, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller Jr. ("Miller") (US Patent 5,029,215) in view of Graumann.

Regarding Claim 4, Miller discloses a device (Figure 4) for calibration of a microphone (microphones 201 and 202), comprising: a loudspeaker (speaker 203) for converting a loudspeaker input signal into sound; a microphone (microphones 201 and 202) for converting received sound into a microphone output signal; and calibration means (computer 412 and amplifiers 410 and 411) for calibrating an output power of the microphone relative to a desired power level (Miller discloses automatic adjustment of the microphone output, i.e. desired power level) (Column 4, lines 36-38), said calibration means (computer 412) comprising impulse response estimating means for estimating an acoustic impulse response of the microphone by correlating the microphone output signal (input from 414 to 412) and the loudspeaker input signal (signal from computer 412 to speaker 203) when the microphone receives the sound from the loudspeaker, whereby the output power of the microphone is estimated (Although Miller does not explicitly disclose the use of impulse response, Miller does disclose the use of the obtaining a characterization (i.e. output power estimation) of the microphone's response

pattern (Col. 4, lines 49-50) where one of ordinary skill in the art would recognize that an impulse response is a type of response pattern). Miller does not disclose a squaring and summation means for creating a representation of a current power level of a diffuse microphone response.

Graumann discloses an automatic microphone calibration device which calculates a standard deviation of the average energy for the last 0.5 seconds (i.e. diffuse microphone response) as a way of detecting noise in the signal (Col. 6, lines 17-38) by summation and squatting means (Col 6, line 30). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to include squaring and summing means to detect noise in the audio signal and make appropriate corrections as taught by Graumann (Col. 6, lines 17-19).

Regarding Claim 5, Grauman further discloses relating means coupled to an output of said squaring and summation means for relating the current power level of the diffuse microphone response ( $E_{AVG}$ ) with a desired power level (AP-9db) (Col. 7, lines 34-40).

Regarding Claim 7, Grauman discloses the desired power level has a predetermined value (AP-9dB) for absolute calibration of the microphone (Col. 7, lines 34-40).

Regarding Claim 11, Grauman further discloses relating means is a function of  $E_{AVG}$  which will inherently be calculated before the relating means (Col. 7, lines 34-40).

3. Claims 2, 3, and 9 allowed.
4. Claims 6, 8, and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin Michalski whose telephone number is (703)305-5598. The examiner can normally be reached on 8 Hours, 5 day/week.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Isen can be reached on (703)305-4386. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JIM

2



XU MEI  
PRIMARY EXAMINER